

1. A communication system having a server for providing a Web E-mail service to a client, wherein said server comprises:

decrypting means for decrypting said encrypted E-mail using said managed key; and

2. The communication system according to claim 1,  
wherein said server further comprises:

said decrypting means decrypts said encrypted E-mail in the case where the use allowance is authenticated by said authentication means.

4. The communication system according to claim 2, wherein said authentication means authenticates the use

allowance using a passphrase inputted from said client.

5        6. The communication system according to claim 2,  
wherein said authentication means authenticates the use  
allowance using a biometrics information inputted from  
said client.

10       6. The communication system according to claim 1,  
wherein said server further comprises encryption  
communication means for establishing and communicating  
a Web encryption communication when communicating with  
said client through the Web.

15       7. The communication system according to claim 2,  
wherein said server further comprises the encryption  
communication means for establishing and communicating  
the Web encryption communication when communicating  
with said client through the Web, and transmission  
means for transmitting the use allowance by said  
20       authentication means and the E-mail decrypted by said  
decrypting means to said client after the Web  
encryption communication is established by said  
encryption communication means.

25       8. The communication system according to claim 7,  
wherein said authentication means authenticates the use  
allowance of said key in units of a session of an

encryption communication continuously established  
between said client and a server.

9. The communication system according to claim 8,  
5 wherein said authentication means stops said  
authenticated use allowance, in the case where at least  
either the case where said encryption communication is  
ended with an error or the case where said encryption  
communication has passed a fixed time is satisfied.

10  
10. The communication system according to claim  
1, wherein said server further comprises signature  
means for executing a digital signature to an E-mail  
required for the digital signature by said client.

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11. The communication system according to claim  
1, wherein said server further comprises:

management means for managing whether said key is  
under multiple use, and

20 said management means comprises stop means for  
stopping the use allowance of said session under  
multiple use in the case where said session is judged  
to be under multiple use.

25 12. The communication system according to claim  
1, wherein the key for decrypting said encrypted E-mail  
is a secret key in a code of a public key cryptosystem.

management means for managing a key for decrypting  
an encrypted E-mail;

a client receiving a Web E-mail service from a server including transmission control means for controlling said decrypted E-mail so as to transmit to said client through the Web.

14. A method for controlling a communication system including a server for providing the client with the Web E-mail service, comprising:

a decrypting step of decrypting said encrypted E-mail using said managed key; and

15. A method for controlling the communication

system according to claim 14, further comprises an authentication step of authenticating use allowance of said key to said client in the server, wherein said encrypted E-mail is decrypted in said decrypting step  
5 in the case where the use allowance is authenticated in said authentication step.

16. A method for controlling the communication system according to claim 15, wherein, in said  
10 authentication step, a window data for authenticating the use allowance of said key is supplied to said client for authentication.

17. A method for controlling the communication system according to claim 15, wherein, in said  
15 authentication step, the use allowance is authenticated using a passphrase inputted from said client.

18. A method for controlling the communication system according to claim 15, wherein, in said  
20 authentication step, the use allowance is authenticated using biometrics information inputted from said client.

19. A method for controlling the communication system according to claim 14, wherein, in said server,  
25 the method further comprises an encryption communication step of establishing and communicating

the Web encryption communication when communicating with said client through the Web.

20. A method for controlling the communication system according to claim 15, in said server, further comprising the encryption communication step of establishing and communicating the Web encryption communication when communicating with said client through the Web, and a transmission control step of transmitting use allowance in said authentication step and the E-mail decrypted by said decrypting step to said client after the Web encryption communication is established in said encryption communication step.

21. A method for controlling the communication system according to claim 20, wherein, in said authentication step, the use allowance of said key is authenticated in units of a session of an encryption communication continuously established between said client and a server.

22. A method for controlling the communication system according to claim 21, wherein, in said authentication step, said authenticated use allowance is stopped in the case when at least either the case where said encryption communication is ended with an error or the case where said encryption communication

has passed a fixed time is satisfied.

23. A method for controlling the communication system according to claim 14, further comprising a signature step of executing the digital signature to the E-mail required for the digital signature from said client in said server.

24. A method for controlling the communication system according to claim 14, further comprising a step of executing a management step of managing whether said key is under multiple use in the server, said management step including a stop step of stopping the use allowance of the session under multiple use in the case where the session is judged to be under multiple use.

25. A method for controlling the communication system according to claim 14, wherein the key for decrypting said encrypted E-mail is a secret key in an encryption of a public key cryptosystem.

26. A method for controlling a communication system including a client receiving a Web E-mail service from a server, comprising a step of executing a management step of managing a key for decrypting an encrypted E-mail, a decrypting step of decrypting said

encrypted E-mail using said managed key and a  
transmission control step of controlling said decrypted  
E-mail so as to transmit to said client in the server,  
and comprising a step of executing a use allowance step  
5 of executing the use allowance of the key of decrypting  
said encrypted E-mail, and a receiving step of  
receiving the E-mail decrypted by said server in the  
client.

10 27. A computer executable control program of a  
communication system including a server for providing a  
Web E-mail service to a client, said program comprising  
a management step of managing a key for decrypting an  
encrypted E-mail, a decrypting step of decrypting said  
15 encrypted E-mail using said managed key, and a  
transmission control step of controlling said decrypted  
E-mail so as to transmit to said client.

20 28. A control program of a communication system  
including a client receiving a Web E-mail service  
through a Web from a server, comprising a step of  
executing a management step of managing a key for  
decrypting an encrypted E-mail, a decrypting step of  
decrypting said encrypted E-mail using said managed  
25 key, and a transmission step of controlling said  
decrypted E-mail so as to transmit to said client in  
the server, and said client comprising a step of



executing a use allowance step of executing the use allowance of the key for decrypting said encrypted E-mail to said server, and a receiving step of receiving the E-mail decrypted by said server in the client.

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29. A storage medium storing a computer executable control program of a communication system including a server of providing a Web E-mail service to a client, the program comprising a step of executing a management step of managing a key for decrypting said encrypted E-mail using said managed key, and a transmission control step of controlling said decrypted E-mail so as to transmit to said client in a server.

30. A storage medium storing a control program of a communication system including a client receiving a Web E-mail service through a Web from a server, wherein the program comprises a step of executing a management step of managing a key for decrypting an encrypted E-mail, a decrypting step of decrypting said encrypted E-mail using said managed key in the server, and a transmission control step of controlling said decrypted E-mail so as to transmit to said client, and wherein the program comprises a step of executing a use allowance step of executing the use allowance of a key for decrypting said encrypted E-mail to said server and a receiving step of receiving the E-mail decrypted by said server.